

REMARKS**The Amendment**

The foregoing amendment corrects an obvious typographical error in claim 22. As no further search and/or consideration is needed, and entry places the application in better form for appeal, entry is deemed to be in order and is requested.

The Rejections

The examiner maintains the following rejections:

- The rejection of claims 11, 20-22 and 24 under 35 U.S.C. § 102 (b) as being anticipated by Jones et al. (WO 00/20157).
- The rejection of claims 11, 20, 21 and 29 under 35 U.S.C. § 102 (b) as being anticipated by or, in the alternative, under 35 U.S.C. § 103 (a) as being anticipated by Shaw et al. (U.S. Patent No. 5,498,304).
- The rejection of claims 13 and 14 under 35 U.S.C. § 103 (a) as being unpatentable over Jones et al. (WO 00/20157).
- Claims 22 and 24 are rejected under 35 U.S.C. § 103 (a) as being unpatentable over Shaw et al. (U.S. Patent No. 5,498,304), as applied to claims 11, 20, 21 and 29, and further in view of Jones et al. (WO 00/20157).
- Claims 11-14, 20-22, 24 29-32, 34 and 39 are rejected under 35 U.S.C. § 103 (a) as being unpatentable over the admitted prior art in view of Jones et al. (WO 00/20157).

Advisory Action

The following numbered paragraphs correspond to the six points of examiner rebuttal set forth on page 2 of the Advisory Action.

1.

In response to applicants' arguments that the polymer insert of Jones is not an adhesive and that Jones does not teach an adhesive composition that bonds substrates together, the examiner argues:

Jones teaches a plastic film comprising an energy-absorbing ingredient at the interface of two plastic substrates wherein energy is applied to heat the energy-absorbing ingredient and melt the plastic of the film and substrates thereby joining the two substrates together. Thus the plastic film comprising an energy-absorbing ingredient is adhesive.

Applicants respectfully disagree.

Jones teaches a process for forming a *weld* between two work pieces. In the process of Jones two substrates are *welded* together. One skilled in the relevant arts would not equate the process of bonding using an adhesive with the process of welding.

Reference is made to page 7, lines 29-33, of Jones:

Welding occurs as a result of the heat generated giving melting of the plastic material up to a depth of typically 0.2mm. Where compatible material is in good contact *interdiffusion of molecules and hence welding* will occur (emphasis added).

The examiner is also referred to the dictionary definition of "weld." To weld, according to Merriam-Webster's Ninth new Collegiate Dictionary (see page 1337, (a) and (b)), is to unit parts (metal to metal or plastic to plastic) by heating and allowing the parts (metal or plastic as the case may be) to flow together.

The examiner is also referred to the dictionary definition of "adhesive." An adhesive, according to Merriam-Webster's Ninth new Collegiate Dictionary (see page 56), is a substance such as glue or cement. Cement is defined as a substance used to make objects adhere to each other (see page 220). Glue is defined as an adhesive substance, something used for sticking things together (see page 523).

Not only is the disclosure devoid of any reference to an adhesive substance or material, but a fair reading of the Jones disclosure by one of ordinary skill in the art is that Jones relate to a welding process whereby two substrates are welded together, not to a process of bonding substrates together using an adhesive composition.

It is well known that claims are to be constructed from the vantage point of a person skilled in the relevant arts. In maintaining this rejection the examiner ignores the common, general-usage dictionary definition, the technical art specific definition as evidence by the Jones disclosure, and the definitions set forth in applicants' own disclosure.

Not only is the examiner applying his own definition, which is improper, but is using the term "adhesive" out of context. In this regard, applicants are using of the term "adhesive" as a thing or an object (noun), whereas the examiner interprets the term "adhesive" to be a modifier of a noun to denote a quality of the thing named (adjective). Thus, while the examiner urges that the plastic insert of Jones is adhesive, Jones fail to disclose or suggest an adhesive. Applicants submit that the examiner's interpretation of the disclosure of Jones is inappropriate.

Reconsideration is requested.

2.

In response to applicants' arguments that their substrates do not melt the joint area, that their invention does not involve welding and their claims are not anticipated by the disclosure of Jones, the examiner argues:

"Applicants claims are not commensurate in scope with this argument."

Applicants respectfully disagree.

Again, the examiner is interpreting the claims using his own definitions of terms used in applicants' claims, without regard to the definition used in applicants' disclosure, or the way a skilled artisan would interpret such terms, or how the common meaning of such terms are defined in the dictionary.

Reconsideration is requested.

3.

In response to applicants' arguments that the insert of weld material of Jones is not a reactivatable adhesive and is not preapplied on at least one of the substrates to be welded together (i.e., a preapplied adhesive), the examiner argues:

Jones teaches the insert may be molded onto one of the substrates during molding or through an overmolding operation. Thus the adhesive insert may be pre-applied and reactivated (e.g. during its use).

Applicants respectfully disagree.

Jones fails to disclose or suggest an adhesive. One skilled in the art would not regard the plastic insert of Jones to be an adhesive, as defined and claimed by applicants, and as commonly recognized in the art.

Reconsideration is requested.

4.

In response to applicants' arguments that in contrast [to the process of Shaw], applicants add an energy-absorbing ingredient to the adhesive, and that Shaw fails to disclose the presence of an energy-absorbing ingredient in the adhesive, the examiner argues:

The use of the term ingredient in the claims merely requires the adhesive to include an energy-absorbing constituent. Shaw teaches a thermoplastic film that is subjected to I-R radiation to melt the film. Thus clearly the thermoplastic film taught by Shaw includes an energy-absorbing constituent to the extent that it melts by application of I-R radiation.

Applicants respectfully disagree.

In one embodiment of Shaw (see col. 4, lines 43-47), it is suggested that a thermoplastic film may be fed between the nips of the corrugating rolls and

subsequently subjected to I-R radiation to melt the film into an adhesive layer. Such a disclosure fails to teach or suggest applicants' claimed invention wherein an adhesive is preapplied to a substrate (i.e., the substrate has applied thereon a reactivatable adhesive). Claim 11 requires that use of a reactivatable adhesive applied to a substrate. Clearly the thermoplastic film of Shaw cannot be considered a reactivatable adhesive. The thermoplastic film of Shaw is not applied adhesively to the substrate to be bonded, but may become an adhesive layer following application of an energy source, i.e., becomes *initially* adhesive, rather than being reactivated as defined and claimed by applicants.

5.

In response to applicants' arguments that there is no disclosure or suggestion in the disclosure [of Shaw] that the adhesive has been pre-applied to the substrate and later reactivated using radiant energy, the examiner argues that:

Shaw discloses the thermoplastic film is fed with a paperboard layer through a nip, i.e., the thermoplastic film is pre-applied, followed by subjecting the film to I-R radiation to melt the film, i.e., reactivating using radian (sic) energy.

Applicants respectfully disagree.

While Shaw teaches feeding of a thermoplastic film which is later melted, there is no disclosure or suggestion that the film is melted onto a substrate, solidified and then reactivated (again melted) in order to bond the substrate to a second substrate. Claim 11 requires that use of a reactivatable adhesive applied to a substrate. Clearly the thermoplastic film of Shaw cannot be considered a reactivatable adhesive as defined in applicants' disclosure. Again, the thermoplastic film of Shaw is not applied adhesively to the substrate to be bonded, but may become an adhesive layer following application of an energy source,

i.e., becomes *initially* adhesive, rather than being reactivated as defined and claimed by applicants.

6.

In response to applicants' arguments that the prior art does not suggest or provide any motivation to use energy absorbing ingredients in amounts needed to reactivate an adhesive present on a substrate as claimed by applicants, and that the combined prior art fails to suggest the claimed modification or a reasonable expectation of success, the examiner argues that:

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include in the hot melt adhesive taught by the admitted prior art energy-absorbing ingredients such as cyanine dyes for reasons including increased speed of melting and only heating of the adhesive (i.e., the paperboard, its contents, or the surrounding area and equipment are not heated).

Applicants respectfully disagree.

The examiner is relying on the Jones document to supply the required motivation. Clearly the Jones disclosure, as noted above, does not teach the use of an adhesive to bond two substrates together but, rather, use of a weld material. The prior art does not suggest or provide any motivation to use energy absorbing ingredients in amounts needed to reactivate an adhesive present on a substrate as claimed by applicants. The combined prior art fails to suggest the claimed modification or a reasonable expectation of success.

Reconsideration is requested.

In view of the above comments, applicants request withdrawal of the outstanding rejections of record and an early notification of allowance.

Respectfully submitted,



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WEBSTER'S
Ninth New
Collegiate
Dictionary

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glucose phosphate • gnaw 523

glucose phosphate n (1927) : a phosphate ester of glucose: as :
GLUCOSE-1-PHOSPHATE b: GLUCOSE-6-PHOSPHATE.
glucose-6-phosphate n [fr. the position at which the phosphate group is attached] (1964) : an ester $C_6H_{11}O_6P$ that is formed from glucose and ATP in the presence of a glucokinase and that is an essential early stage in glucose metabolism.

1338 weld • well

weld /wel-d-baj/ *adj*
weld *n* (1831) 1: a welded joint 2: union by welding; the state or condition of being welded
welder /wel-dar/ *n* (ca. 1828) 1: one that welds; as a welder; one whose work is welding 2: a machine used in welding
weldment /wel(d)-munt/ *n* (1941) 1: a unit formed by welding together an assembly of pieces
welfare /wel-fal-er/ *n* (M.E. fr. the phrase *wel faren* to fare well) (1463) 1: the state of doing well esp. in respect to good fortune & happiness, well-being or prosperity 2: *welfare work* 3: *Welfare 2b*
welfare *adj* (1904) 1: of relating to, or concerned with welfare and esp. with improvement of the welfare of disadvantaged social groups (~ legislation) 2: receiving public welfare benefits (~ mothers)
welfare state *n* (1945) 1: a social system based on the assumption by a political state of primary responsibility for the individual and social welfare of its citizens 2: a nation or state characterized by the operation of the welfare state system
welfare work *n* (ca. 1908): organized efforts by a community or organization for the social betterment of a group in society ~ **welfare worker**
welfareism /wel-fal-iz-izm/ *n* (1949): the complex of policies, attitudes, and beliefs associated with the welfare state ~ **welfareist**
welkin /wel-kin/ *n* [M.E. lit. cloud. fr. OE *welcun*: akin to OHG *wolcun*

kan cloud, OSlav *vlaga* moisture] (12c) 1: a: the vault of the sky 2: the upper atmosphere
well /wel/ *n* [M.E. *wella*, fr. OE *wella*: akin to OHG *wella* wave, OE *wella* to bubble, boil. L. *wellere* to roll ~ more at *VOLUME*] (bef. 12c) 1: a: an issue of water from the earth: a pool fed by a spring 2: a: FOUNTAIN, WELLSPRING 2: a pit or hole sunk into the earth to reach a supply of water 3: a: an enclosure in the middle of a ship's hold to protect from damage and facilitate the inspection of the pumps 4: a compartment in the hold of a fishing boat in which fish are kept alive 4: a shaft or hole sunk to obtain oil, brine, or gas 5: an open space resembling a well in being damp, cool, deep, or dark 6: a deep vertical hole 6: a source from which something may be drawn as needed 8: a pronounced minimum of a variable in physics (a potential ~) **well** *v* (bef. 12c) 1: to rise to the surface and flow forth (tears ~ from her eyes) 2: to rise to the surface like a flood of liquid (Glooming ~ed up in his breast) ~ *vs*: to emit in a copious free flow **well** *adj* better /best/ *best* /best/ [M.E. *wel*, fr. OE: akin to OHG *wella* well, OE *wella* to wish ~ more at *VOLUME*] (bef. 12c) 1: a: in a good or proper manner: JUSTLY, RIGHTLY 2: satisfactorily with respect to conduct or action (did ~ in math) 2: in a kindly or friendly

WEIGHTS AND MEASURES¹

UNIT	ABBR. OR SYMBOL	EQUIVALENTS IN OTHER UNITS OF SAME SYSTEM	METRIC EQUIVALENT
WEIGHT			
<i>avoirdupois</i>			
ton		20 short hundredweight, 2000 pounds	0.907 metric ton
short ton		20 long hundredweight, 2240 pounds	1.016 metric ton
hundredweight	cwt	100 pounds, 0.05 short ton	45.359 kilograms
short hundredweight		112 pounds, 0.05 long ton	50.802 kilograms
long hundredweight		16 cwt, 7000 grains	0.454 kilogram
pound	lb or 1b avdp also #	16 drams, 437.5 grains	28.350 grams
ounce	oz or 1/16 avdp	27.34 grains, 0.0025 ounce	1.772 grams
dram	dr or dr avdp	0.017 dram, 0.002286 ounce	0.0648 gram
grain	gr		
<i>apothecaries'</i>			
pound	lb or 1b ap	12 ounces, 240 pennyweight, 5760 grains	0.373 kilogram
ounce	oz 1	20 pennyweight, 480 grains	31.103 grams
pennyweight	dwt also pwt	24 grains, 0.05 ounce	1.555 grams
grain	gr	0.047 pennyweight, 0.002083 ounce	0.0648 gram
<i>metric</i>			
pound	lb or 1b	12 ounces, 5760 grains	0.373 kilogram
ounce	oz 1	16 drams, 480 grains	31.103 grams
pennyweight	dwt also pwt	24 grains, 0.05 ounce	1.555 grams
grain	gr	0.047 pennyweight, 0.002083 ounce	0.0648 gram
CAPACITY			
<i>U.S. liquid measure</i>			
quart	qt	4 quarts (2.1 cubic inches)	0.946 liters
gallon	gal	128 fluid ounces (231 cubic inches)	3.785 liters
gill	gi	4 gills (231 cubic inches)	0.473 liter
fluidounce	fl oz or f 3	8 fluidounces (2.121 cubic inches)	118.294 milliliters
fluidram	fl dr or f 4	8 fluidrams (1.305 cubic inches)	29.573 milliliters
minim	min or m	60 minims (0.226 cubic inch)	1.697 milliliters
		16 fluidrams (0.03756 cubic inch)	0.46161 milliliter
<i>U.S. dry measure</i>			
heathel	bu	4 pecks (215.04 cubic inches)	35.239 liters
peck	pk	8 quarts (537.605 cubic inches)	8.110 liters
quart	qt	2 pints (67.561 cubic inches)	1.101 liters
pint	pt	1/2 quart (33.600 cubic inches)	0.551 liter
<i>British Imperial (liquid and dry measure)</i>			
heathel	bu	4 pecks (219.56 cubic inches)	0.336 cubic meter
peck	pk	2 gallons (534.84 cubic inches)	0.091 cubic meter
gallon	gal	4 quarts (277.420 cubic inches)	4.546 liters
quart	qt	2 pints (69.353 cubic inches)	1.136 liters
pint	pt	4 gills (34.678 cubic inches)	568.26 cubic centimeters
gill	gi	5 fluidounces (8.669 cubic inches)	142.066 cubic centimeters
fluidounce	fl oz or f 3	8 fluidrams (1.733 cubic inches)	28.412 cubic centimeters
fluidram	fl dr or f 4	60 minims (0.216734 cubic inch)	3.5516 cubic centimeters
minim	min or m	16 fluidrams (0.03612 cubic inch)	0.559194 cubic centimeters
LENGTH			
mile	mi	5280 feet, 1760 yards, 1760 fathoms	1.609 kilometers
rod	rd	5.5 yards, 16.5 feet	5.029 meters
yard	yrd	3 feet, 36 inches	0.9144 meter
foot	ft or f	12 inches, 0.333 yard	30.48 centimeters
inch	in or "	0.083 foot, 0.028 yard	2.54 centimeters
AREA			
square mile	sq mi or mi ²	640 acres, 102,400 square rods	2.590 square kilometers
acre	ac	4840 square yards, 43,560 square feet	0.405 hectare, 4047 square meters
square rod	sq rd or rd ²	30.25 square yards, 0.00625 acre	25.293 square meters
square yard	sq yd or yd ²	1296 square inches, 9 square feet	0.836 square meter
square foot	sq ft or ft ²	144 square inches, 0.111 square yard	0.093 square meter
square inch	sq in or in ²	0.0069 square foot, 0.00077 square yard	6.452 square centimeters
VOLUME			